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CABLE VINELRINS LONDON W1 TELEX 24440

October 17, 1986

Mr. Larry Soward, Director
Texas Water Commission
P. O. Box 13087
Capitol Station
Austin, Texas 78711

Re: Nalco Chemical Company
RCRA Docket No. VI-508-H

Dear Mr. Soward:

Pursuant to paragraph 4 of the compliance schedule of the May 30, 1986 consent agreement entered between the United States Environmental Protection Agency and Nalco Chemical Company in the referenced matter, enclosed are copies of the analytical results of representative samples taken of sludge, sediment accumulated in the bottom of the surface impoundment, and of soil underlying the surface impoundment.

The report with the sample identifier 0-10" is an analysis of the control sample taken from an inactive area of the Odessa facility 0 to 10 inches below the surface. The report identified as 10-20" is the analysis of the sample taken 10 to 20 inches below the bottom of the concrete impoundment in the north corner of the impoundment. The concrete is approximately 6 inches thick so the sample represents soil 4 to 14 inches below the surface. The report labeled 20-30" is an analysis of soil samples from 20 to 30 inches below the surface of the impoundment, same location.

Under separate cover, these analyses have also been forwarded to Carla Nelson, U. S. EPA Region VI.

3-4-77
OCT 21 1986

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If you have any questions regarding the analyses,
please call Leo Domzalski at (312) 961-9500, extension 1284.

Sincerely,

Jeff Civins

Jeff Civins

JC:sg

Enclosures

cc: Carla Nelson
Audrone Karalius
Leo Domzalski

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October 1, 1986

Mr. Odland Karstan
Nalco Chemical
1 Nalco Center
Naperville, IL 60566-1024

Dear MR. Karstan:

We at CompuChem® are pleased to provide our report for the analysis you requested. Data for the following sample are enclosed:

Your ID Number	Our ID Number	Analysis Code	Order Number	Description of Work Requested	Report Format
20-30"	100335	043	9250	Base/Neutral	Silver

In this report we have included the analytical results, the method reference, and the quality control summary. If any anomalies were encountered in this analysis, they would be referenced in an attached Quality Assurance Notice(s). Instrument documentation is provided with reports purchased in our Gold Report format.

To obtain additional technical information concerning this report, please contact your Sales Representative. In addition to resolving your questions, they can provide you with a complete overview of our line of services and assist you in identifying those services which will effectively and efficiently support your monitoring program.

For your convenience, your Customer Service Representative can help you place a new order, obtain information about a sample's status or obtain assistance with sample logistics. Your Sales Representative and your Customer Service Representative can be reached at 1/919-549-8263.

Thank you for choosing CompuChem®. We would like to continue providing you analytical support and services. We would appreciate your comments regarding the quality of services you have received from CompuChem®; client satisfaction is important to us. Please address your comments to Mr. Kevin McConnaghy, Vice-President of Marketing, at the address given below.

Sincerely,

Mary E. Mitchell
Supervisor, Report Deliverables

cc: Accounting
(Cover letter only)



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Chronicle

Method Reference

Data Summary

• Base/Neutral Extractables

Quality Control Summary

Quality Assurance Notices*

Chain of Custody**

*These notices are included where appropriate for data qualification.

**When the original chain of custody is submitted with the sample(s), a copy of it is included with the report.



ANALYTICAL REPORT OF DATA
SUBMITTED TO:

Mr. Odland Karstan
Nalco Chemical
1 Nalco Center
Naperville, IL 60566-1024

CHRONICLE

ITEM NO.	SAMPLE IDENTIFIER	COMPUCHEM® NUMBER	DATE SAMPLE RECEIVED	DATE SAMPLE EXTRACTED	DATE BASE/NEUTRAL FRACTION ANALYZED
1.	20-30"	100335	09/09/86	09/11/86	09/16/86

METHOD REFERENCE

For the initial sample preparation, CompuChem employs a modification of the current EPA Contract Laboratory Program (CLP) procedure for the Determination of Low Levels of Semivolatile Organics in Soil and Sediments. Further sample preparation, specifically the extract partitioning technique, is taken from the second edition of "The Test Methods For Evaluating Solid Waste", SW-846. Analysis for the acid and base/neutral priority pollutants is performed in accordance with USEPA Method 625 Volume 49, October 26, 1984.

Method Summary

A nominal amount of sample, approximately 30 grams, is mixed with (anhydrous) sodium sulfate and serially extracted with a 50/50 mixture of methylene chloride and acetone using sonication. The solvent extract is then concentrated and partitioned into separate base/neutral and acid extracts. The base/neutral extract is generated by washing the solvent extract with a basic (pH greater than 11) water wash which removes the acid constituents from the organic extract. The organic extract, now containing only base/neutral compounds, is then dried and concentrated. The pH of the aqueous basic wash is adjusted to less than 2 and serially extracted with methylene chloride. The methylene chloride containing the acid compounds is dried and concentrated.

Qualitative identification is performed using the retention time and the relative abundance of three characteristic ions. Quantitative analysis is performed using either external or internal standard techniques.

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COMPOUND LIST -- BASE-NEUTRAL EXTRACTABLES

SAMPLE IDENTIFIER: 20-30"
COMPUCEM® SAMPLE NUMBER: 100335

	CONCENTRATION (UG/KG)	DETECTION LIMIT (UG/KG)
1B. NAPHTHALENE	BDL	330
2B. ACENAPHTHYLENE	BDL	330
3B. FLUORENE	BDL	330
4B. PHENANTHRENE	BDL	330
5B. DI-N-BUTYLPHTHALATE	BDL	330

Surrogates Recoveries - Introduced at the beginning of the extraction, surrogate standards are deuterated and/or select compounds that analytically mimic the response of certain analytes. Known concentrations of these surrogates are added to the sample and a percent recovery is calculated. This recovery acts as a barometer of extraction efficiency and analytical response for the individual sample.

	<u>%Recovery</u>	<u>Control Range%</u>
D5-Nitrobenzene	90	(20-140)
2-Fluorobiphenyl	94	(20-140)
D14-Terphenyl	77	(20-150)
D10-Pyrene*	92	*

BDL=BELOW DETECTION LIMIT

*Advisory Surrogate; therefore no control range.

QUALITY CONTROL SUMMARY

SAMPLE IDENTIFIER: 20-30"
COMPUCEM® SAMPLE NUMBER: 100335

BASE/NEUTRAL

	<u>NUMBER</u>	<u>ACCEPTANCE CRITERIA</u>
Blank	101011	OK
Sample Spike	99884	OK
DFTPP*	DG860915807	OK
Shift Standard	BT860915807	OK

*The tuning calibration compound, Decafluorotriphenylphosphine, is used for the base/neutral instruments.

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NALCO CHEMICAL

CHAIN OF CUSTODY RECORD

WILMINGTON LABORATORIES

PROJ. NO.		PROJECT NAME		NO. OF CONTAINERS		REMARKS	
		ODESSA NORTH FRONT					
SAMPLER: (Signature)							
JERRY M. BURTON							
STA. NO.	DATE	TIME	CON.	STATION LOCATION			
	9/1	11:30 AM					
	9/1	11:30 AM					
	9/1	12:00 PM					
				100330			
				31			
				32			
				33			
				34			
				35			
ORDER# 9250					SHIPPED: 8/26/86		
15017							
RECEIVED: 9/1/86							
CLIENT: Nalco Chemical							
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Date / Time	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time	
				Tina Huf		9/1/86 12:00	
Distribution: Original Accompanies Shipment; Copy to				Field File			

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